Title 1 Department of Natural Resources and Environmental Control
1138 Emission Standards for Hazardous Air Pollutants for Source Categories

10.0 Emission Standards for Hazardous Air Pollutants for Area Source Plating and Polishing Operations

~~11/11/09~~ ??/11/13

10.1 Applicability.

10.1.1 The provisions of 10.0 of this regulation apply to each plating and polishing operation that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria in 10.1.1.1 through 10.1.1.3 of this regulation.

10.1.1.1 A plating and polishing operation is any operation that is engaged in one or more of the processes listed in 10.1.1.1.1 through 10.1.1.1.6 of this regulation.

10.1.1.1.1 Non-chromium electroplating.

10.1.1.1.2 Electroless plating.

10.1.1.1.3 Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating. Thermal spraying is also a non-electrolytic metal coating process.

10.1.1.1.4 Dry mechanical polishing of finished metals ~~or~~ and formed ~~products~~ parts after plating or thermal spraying.

10.1.1.1.5 Electroforming.

10.1.1.1.6 Electropolishing.

10.1.1.2 An area source of HAP emissions is a source of hazardous air pollutants (HAPs) that is not a major source of HAP emissions, is not located at a major source of HAP emissions, and is not part of a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs. ***No change warranted.***

10.1.1.3 The plating and polishing operation uses or has emissions of one or more plating and polishing metal HAPs, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel. With the exception of lead, plating and polishing metal HAPs also include any of these metals in their elemental form.

10.1.2 [Reserved]

10.1.3 The provisions of 10.0 of this regulation apply to each new, reconstructed, or existing affected source. The affected source is each process tank or other operation specified in 10.1.3.1 through 10.1.3.3 of this regulation.

10.1.3.1 Each process tank that contains one or more of the plating and polishing metal HAPs and is used for non-chromium electroplating, electroforming, electropolishing, electroless plating, or other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

10.1.3.2 Each thermal spraying operation that applies one or more of the plating and polishing metal HAPs.

10.1.3.3 Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAPs.

10.1.4 An affected source is existing if the owner or operator commenced construction or reconstruction of the affected source on or before March 14, 2008.

10.1.5 An affected source is new if the owner or operator commenced construction or reconstruction of the affected source after March 14, 2008.

10.1.6 The provisions of 10.0 of this regulation do not apply to any of the process tanks or other operations specified in 10.1.6.1 through 10.1.6.6 of this regulation.

10.1.6.1 Process tanks that are subject to the requirements of 6.0 of this regulation.

10.1.6.2 Research and development process tanks.

10.1.6.3 Process tanks that are used strictly for educational purposes.

10.1.6.4 Plating, polishing, coating, or ~~Thermal~~ thermal spraying operations conducted to repair surfaces or equipment.

10.1.6.5 Dry mechanical polishing operations conducted to restore the original finish to a surface.

10.1.6.6 Any plating or polishing operation that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1% or more by weight (as the metal) or does not use any material that contains manganese in amounts of 1.0% or more by weight (as the metal), as used. Information used to determine the amount of plating and polishing metal HAP in materials used in the plating or polishing ~~process~~ operation may include information ~~as~~ reported on the Material Safety Data Sheet for the material, but is not required. For plating or polishing tanks, the HAP content may be determined from the final bath contents "as used" to plate or to polish.

10.1.7 The owner or operator of an area source subject to 10.0 of this regulation is exempt from the obligation to obtain a Title V operating permit under 7 **DE Admin. Code** 1130 of the State of Delaware "Regulations Governing the Control of Air Pollution", if the owner or operator is not required to obtain a Title V operating permit under 3.1 of 7 **DE Admin. Code** 1130 for a reason other than the owner or operator's status as an area source under 10.0. Notwithstanding the previous sentence, the owner or operator shall continue to comply with the provisions of 10.0.

10.2 Definitions.

Unless defined below, all terms in 10.0 of this regulation have the meaning given them in the Act or in 3.2 of this regulation.

"Batch non-cyanide electrolytic process tank" means a tank used for ~~an~~ a non-cyanide electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is immersed in an electrolytic process tank bath as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

"Bath" means the liquid contents of a process tank that is used for electroplating, electroforming, electropolishing, or other metal coating operations located at a plating and polishing operation.

"Bench-scale" means any operation that is small enough to be performed on a bench, table, or similar structure so that the equipment is not directly contacting the floor.

"Capture system" means the collection of components used to capture gases and fumes released from one or more emission points and then to transport the captured gas stream to a control device. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

"Cartridge filter" means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove particulate matter (PM) from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

"Composite mesh pad" means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material of varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

"Continuous non-cyanide electrolytic process tank" means a tank used for ~~an~~ a non-cyanide electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

"Control device" means equipment used to collect or reduce the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

"Control system" means the combination of a capture system and a control device. The overall control efficiency of any control system is a combination of the ability to capture the air emissions (i.e., the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency.

"Conversion coatings" ~~are~~ means coatings that form a hard metal finish on ~~an object~~ a part when the ~~object~~ part is submerged in a tank bath or solution that contains the conversion coatings. Conversion coatings for the purposes of 10.0 of this ~~rule~~ regulation include coatings composed of chromium, as well as the other plating and polishing metal HAP, where no electrical current is used.

~~**"Cyanide electrolytic process tank"** means an electrolytic process tank used for cyanide electrolytic processes.~~

"Cyanide electrolytic process" means an electrolytic process that uses cyanide as a major bath ingredient, that operates at pH of 12 or more, and that uses or emits any of the plating and polishing metal HAPs. The cyanide in the bath works to dissolve the metal HAP added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum electroplating process. All cyanide electroplating baths at pH greater than or equal to 12 have ~~cyanide~~ metal-cyanide complexes in solution. The plating and polishing metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable electroplating conditions would occur in the tank.

"Cyanide electrolytic process tank" means an electrolytic process tank used for cyanide electrolytic processes.

"Deviation" means any instance in which an affected source or an owner or operator of an affected source:

- ~~"~~Fails to meet any requirement or obligation established in 10.0 of this regulation including, but not limited to, any equipment standard (including emission and operating limit), management practice, or operation and maintenance requirement;

- ~~"~~Fails to meet any term or condition that is adopted to implement an applicable requirement in 10.0 of this regulation and that is included in the operating permit for any affected source required to obtain such a permit; or

- ~~"~~Fails to meet any equipment standard (including emission and operating limit), management practice, or operation and maintenance requirement in 10.0 of this regulation during startup, shutdown, or malfunction.

"Dry mechanical polishing" means a process used for removing defects from ~~or~~ and smoothing the surface of finished metals ~~or~~ and formed ~~products~~ parts after ~~electro~~plating or thermal spraying with any of the plating and polishing metal HAPs using automatic or manually-operated machines that have hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles. The affected process does not include polishing with use of pastes, liquids, lubricants, or any other added materials.

"Electroforming" means an electrolytic process that uses or emits any of the plating and polishing metal HAPs that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate or mandrel is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

"Electroless plating" means a process that uses or emits any of the plating and polishing metal HAPs in which metallic ions in a tank bath are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating.

"Electrolytic process" means a process that uses or emits any of the plating and polishing metal HAPs in which metallic ions in a tank bath are reduced to form a metal coating on or to remove a metal coating from the surface of parts ~~or products~~ using electrical energy.

"Electrolytic process tank" means a process tank in which electrolytic processes occur. This term does not include tanks containing solutions that are used to rinse or wash parts prior to placing the parts in the electrolytic process tank or subsequent to removing the parts from the electrolytic process tank. This term also does not include thermal spraying or dry mechanical polishing.

"Electroplating" means an electrolytic process that uses or emits any of the plating and polishing metal HAPs in which metal ions in a tank bath are reduced onto the surface of the ~~work piece~~ part (the cathode) via an electrical current. The metal ions in the tank bath are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the tank bath with metal salts or oxides. Electroplating is also called electrolytic plating.

"Electropolishing" means an electrolytic process performed in a tank after plating that uses or emits any of the plating and polishing metal HAPs in which a ~~work piece~~ part is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant. Electropolishing is also called electrolytic polishing. For the purposes of 10.0 of this ~~subpart~~ regulation, electropolishing does not include bench-scale operations.

"Fabric filter" means a type of control device used for collecting PM by filtering a ~~gas~~ process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

"Filters", for the purposes of 10.0 of this ~~part~~ regulation, include cartridge, fabric, or HEPA filters~~, as defined in this section~~.

"Flash ~~or short-term~~ electrolytic process tank" means an electrolytic process tank in which flash ~~or short-term~~ electroplating occurs.

"Flash ~~or short-term~~ electroplating" means an electrolytic process performed in a tank that uses or emits any of the plating and polishing metal HAPs and that is used no more than three cumulative minutes per hour or no more than one cumulative hour per day. Flash electroplating is also called short-term electroplating.

"HAP" means any air pollutant listed in or pursuant to Section 112(b) of the Act. HAPs are also called air toxics. The five plating and polishing metal HAPs are listed in Section 112(b).

"High efficiency particulate air (HEPA) filter" means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97% of airborne particles that are 0.3 micrometers or larger in diameter.

"Maintenance" ~~is~~ means any process at a plating and polishing ~~facility~~ operation that is performed to keep the process equipment or the facility operating properly and is not performed on items to be sold as products.

~~**"Major facility for HAP"** is any facility that emits greater than 10 tpy of any HAP, or that emits a combined total of all HAP of over 25 tpy, where the HAP used to determine the total facility emissions are not restricted to only plating and polishing metal HAP or from only plating and polishing operations.~~
Didn't add; is never used

"Mesh pad mist eliminator" means a type of control device that uses layers of interlocked filaments densely packed between two supporting grids to remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

"Metal coating operation" means any process performed either in a process tank that contains liquids or as part of a thermal spraying operation that applies one or more plating and polishing metal HAPs to the surface of parts ~~or products~~ used in manufacturing. These processes include, but are not limited to, non-chromium electroplating, electroforming, electropolishing, other non-electrolytic metal coating processes, such as electroless nickel plating, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating, and thermal spraying.

"Metal HAP content of material used in plating and polishing" ~~is~~ means the HAP content as determined from an analysis or engineering estimate of the HAP contents of the tank bath or solution~~,~~ in the case of electroplating, metal coating, or

electropolishing~~;~~ or the HAP content of the metal coating being applied in the case of thermal spraying. Material Safety ~~d~~Data ~~s~~Sheet ~~(SDS)~~ information may be used in lieu of testing or engineering estimates but is not required to be used.

"Non-chromium electroplating" means an electroplating process that uses or emits any of the plating and polishing metal HAPs that is not subject to the provisions of 6.0 of this regulation.

"Non-cyanide electrolytic process" means an electrolytic process that uses or emits any of the plating and polishing metal HAPs performed without cyanide in the tank. This process does not use cyanide in the process tank and operate at pH values less than 12. This process uses electricity and adds or removes metals such as plating and polishing metal HAPs from parts ~~or products~~ used in manufacturing.

"Non-cyanide electrolytic process tank" means a tank used for non-cyanide electrolytic processes.

"Non-electrolytic plating" means a process that uses or emits any of the plating and polishing metal HAPs~~, as defined in this section,~~ in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include electroless nickel plating, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

"Packed-bed scrubber" means a type of control device that includes a single or double packed-bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

"Permanent thermal spraying" means a thermal spraying operation that is not a temporary thermal spraying operation.

"Plating and polishing metal HAPs" means compounds of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1% by weight (as the metal) and does not contain manganese in amounts greater than or equal to 1.0% by weight (as the metal)~~, as reported on the Material Safety Data Sheet for the material,~~ is not considered to be a plating and polishing metal HAP.

"Plating and polishing operation" means an operation that uses or emits any of the plating and polishing metal HAPs and is engaged in one or more of the following:

- Non-chromium electroplating;
- Electroforming;
- Electropolishing;
- Electroless plating;
- Other non-electrolytic metal coating processes performed in a tank, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating;
- Thermal spraying; or
- Dry mechanical polishing of finished metals ~~or~~ and formed ~~products~~ parts after plating or thermal spraying.

Plating is performed in a tank or thermally sprayed so that a metal coating is irreversibly applied to ~~an object~~ a part. Plating and polishing does not include any bench-scale ~~processes~~ operations.

~~"**Plating and polishing metal HAPs**" means compounds of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1% by weight and does not contain manganese in amounts greater than or equal to 1.0% by weight, as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.~~

~~Plating and polishing process tanks means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: electroplating processes other than chromium electroplating (i.e., nonchromium electroplating) performed in a tank; electroless plating; and nonelectrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to clean, rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include any bench scale operations.~~ ***Didn't add; only used within the definition of itself***

"PM" means solids or particulate matter that is emitted into the air.

"Repair" means any process used to return a finished ~~object~~ part or tool back to its original function or shape.

"Research and development process tank" means any process tank that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a de minimis manner.

"Startup of the tank bath" ~~is~~ means when the components or relative proportions of the various components in the bath have been altered from the most recent operating period. Startup of the tank bath does not include events where only the tank's heating or agitation and other mechanical operations are turned back on after being turned off for a period of time.

"Surface cover" means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75% of the open surface area of a continuous non-cyanide electrolytic process tank.

"Tank cover" means a solid structure made of an impervious material that is designed to cover the entire open surface of a batch non-cyanide electrolytic process tank or a flash ~~or short-term~~ electrolytic process tank.

"Temporary thermal spraying" means a thermal spraying operation that uses or emits any of the plating and polishing metal HAPs that lasts no more than one hour in duration during any one day~~,~~ and that is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

"Thermal spraying" means a process that uses or emits any of the plating and polishing metal HAPs in which a metallic coating is applied by projecting heated, molten, or semi-molten metal particles onto a substrate. Commonly used thermal spraying methods include high velocity oxy-fuel spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying. This operation does not include spray painting at ambient temperatures. This process is also called metal spraying ~~or flame spraying~~.

"Water curtain" means a type of control device that draws a gas stream through a continuous curtain of moving water to collect and remove suspended PM from the gas stream.

"Wetting agent/fume suppressant" means any chemical agent that reduces or suppresses fumes or mists from an electrolytic process tank by reducing the surface tension of the tank bath.

10.3 Compliance dates.

10.3.1 The owner or operator of an existing affected source shall be in compliance with the applicable provisions of 10.0 of this regulation by no later than July 1, 2010.

10.3.2 The owner or operator of a new or reconstructed affected source that has an initial startup on or before July 1, 2008 shall be in compliance with the applicable provisions of 10.0 of this regulation by no later than November 11, 2009.

10.3.3 The owner or operator of a new or reconstructed affected source that has an initial startup after July 1, 2008 shall be in compliance with the applicable provisions of 10.0 of this regulation immediately upon startup or November 11, 2009, whichever is later.

10.4 Standards and management practices.

On and after the applicable compliance date, the owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall be in compliance with the applicable standards and management practices in 10.4.1 through 10.4.8 of this regulation at all times.

10.4.1 The owner or operator of an affected non-cyanide electrolytic process tank shall be in compliance with the requirements in 10.4.1.1, 10.4.1.2, or 10.4.1.3 of this regulation.

10.4.1.1 The owner or operator shall use a wetting agent/fume suppressant in the tank bath of the affected process tank in compliance with the requirements in 10.4.1.1.1 through 10.4.1.1.3 of this regulation. ***No change warranted.***

10.4.1.1.1 The owner or operator shall initially add the wetting agent/fume suppressant to the tank bath according to the manufacturer's specifications and instructions.

10.4.1.1.2 When replenishing the tank bath, the owner or operator shall add the wetting agent/fume suppressant to the other bath chemistry ingredients in the same proportion as in the original make-up of the tank bath or in proportions such that the tank bath contents are returned to that of the original make-up of the tank bath.

10.4.1.1.3 If the wetting agent/fume suppressant is incorporated into the other bath chemistry ingredients, it is not necessary to add additional wetting agent/fume suppressant to the tank bath to comply with 10.0 of this regulation.

10.4.1.2 The owner or operator shall operate a capture system that collects the emissions from the affected process tank and transports the emissions to a composite mesh pad, packed-bed scrubber, or mesh pad mist eliminator in compliance with the requirements in 10.4.1.2.1 and 10.4.1.2.2 of this regulation.

10.4.1.2.1 The owner or operator shall operate the capture system and control device according to the manufacturer's specifications and operating instructions.

10.4.1.2.2 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.4.1.3 The owner or operator shall cover the affected process tank surface in compliance with the requirements in 10.4.1.3.1 or 10.4.1.3.2 of this regulation.

10.4.1.3.1 For batch non-cyanide electrolytic process tanks, the owner or operator shall use a tank cover over all of the effective surface area of the process tank for at least 95% of the electrolytic process operating time.

10.4.1.3.2 For continuous non-cyanide electrolytic process tanks, the owner or operator shall use a surface cover over at least 75% of the surface area of the process tank, whenever the electrolytic process tank is in operation.

10.4.2 The owner or operator of an affected flash ~~or short-term~~ electrolytic process tank shall be in compliance with the requirements in 10.4.2.1 or 10.4.2.2 of this regulation.

10.4.2.1 The owner or operator shall limit flash ~~or short-term~~ electroplating to no more than one cumulative hour per day or three cumulative minutes per hour of electroplating time.

10.4.2.2 The owner or operator shall use a tank cover over all of the effective surface area of the process tank for at least 95% of the electrolytic process operating time.

10.4.3 The owner or operator of an affected process tank that is used both for flash ~~or short-term~~ electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of flash ~~or short-term~~ electroplating in 10.2 of this regulation) shall be in compliance with the requirements in 10.4.1 or 10.4.2 of this regulation, whichever applies to the process operation.

10.4.4 The owner or operator of an affected cyanide electrolytic process tank shall measure and record the pH of the tank bath upon startup of the tank bath. No additional pH measurements are required.

10.4.5 The owner or operator of an affected dry mechanical polishing operation shall operate a capture system that collects particulate matter (PM) emissions from the affected dry mechanical polishing operation and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter in compliance with the requirements in 10.4.5.1 and 10.4.5.2 of this regulation. ***No change warranted.***

10.4.5.1 The owner or operator shall operate the capture system and control device according to the manufacturer's specifications and operating instructions.

10.4.5.2 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.4.6 The owner or operator of an affected thermal spraying operation shall be in compliance with the applicable requirements in 10.4.6.1 through 10.4.6.3 of this regulation.

10.4.6.1 For existing permanent thermal spraying operations, the owner or operator shall operate a capture system that collects PM emissions from the affected thermal spraying operation and transports the PM emissions to a water curtain, cartridge filter, fabric filter, or HEPA filter in compliance with the requirements in 10.4.6.1.1 and 10.4.6.1.2 of this regulation.

10.4.6.1.1 The owner or operator shall operate the capture system and control device according to the manufacturer's specifications and operating instructions.

10.4.6.1.2 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.4.6.2 For new or reconstructed permanent thermal spraying operations, the owner or operator shall operate a capture system that collects PM emissions from the affected thermal spraying operation and transports the PM emissions to a cartridge, fabric, or HEPA filter in compliance with the requirements in 10.4.6.2.1 and 10.4.6.2.2 of this regulation.

10.4.6.2.1 The owner or operator shall operate the capture system and control device according to the manufacturer's specifications and operating instructions.

10.4.6.2.2 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.4.6.3 For temporary thermal spraying operations, the owner or operator shall be in compliance with the requirements in 10.4.6.3.1 and 10.4.6.3.2 of this regulation.

10.4.6.3.1 The owner or operator shall limit temporary thermal spraying operations to no more than one hour during any one day.

10.4.6.3.2 The owner or operator shall document the amount of time the thermal spraying operations occur during each day and where the thermal spraying is conducted.

10.4.7 ~~Except for the owner or operator of a dry mechanical polishing operation, the~~ The owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall implement the applicable management practices in 10.4.7.1 through 10.4.7.13 of this regulation. The Department may approve an alternative to any requirement of 10.4.7.1 through 10.4.7.13 if the owner or operator demonstrates that compliance with such requirement is not practicable.

10.4.7.1 Minimize tank bath agitation when removing any parts from the process tank, except when necessary to meet part quality requirements.

10.4.7.2 Maximize the draining of tank bath solution back into the process tank by extending drip time when removing parts from the process tank, by using drain boards or drip shields, or by withdrawing parts slowly from the process tank.

10.4.7.3 Optimize the design of barrels, racks, and parts to minimize drag out of tank bath solution (such as by using slotted barrels and tilted racks or by designing parts with flow-through holes to allow the tank bath solution to drip back into the tank).

10.4.7.4 Use tank covers, if already owned and available at the facility.

10.4.7.5 Minimize or reduce heating of tank baths (e.g., when doing so would not interrupt production or adversely affect part quality).

10.4.7.6 Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources.

10.4.7.7 Minimize tank bath contamination through the prevention or quick recovery of dropped parts, the use of distilled/de-ionized water, the use of water filtration, the pre-cleaning of parts to be plated, and the thorough rinsing of pre-treated parts to be plated.

10.4.7.8 Maintain quality control of chemicals.

10.4.7.9 Maintain quality control of chemical and other bath ingredient concentrations in the process tanks.

10.4.7.10 Perform general good housekeeping through regular sweeping or vacuuming and periodic wash downs.

10.4.7.11 Minimize spills and overflow of process tanks.

10.4.7.12 Use a squeegee system in continuous ~~or reel-to-reel~~ process tanks.

10.4.7.13 Perform regular inspections to identify leaks and opportunities for pollution prevention.

10.4.8 The owner or operator of an affected source, who uses a control system to comply with 10.4.1.2, 10.4.5, 10.4.6.1, or 10.4.6.2 of this regulation, shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the affected source during periods of startup, shutdown, and malfunction and a program of corrective actions for malfunctioning process, control device, and monitoring equipment used to comply with 10.0 of this regulation. At a minimum, this plan shall include the following:

10.4.8.1 The specifications for each control device including minimum and maximum differential pressure drop readings that define the proper operating ranges.

10.4.8.2 The monitoring frequency for each control device.

10.4.8.3 The scheduled dates for performing inspections on each control device.

10.4.8.4 The routine maintenance schedule and procedures for each control device developed in accordance with the manufacturer's recommendations.

10.4.8.5 The operational plan that describes, in detail, a program of corrective actions to be taken when monitoring results are outside proper operating ranges.

10.4.8.6 The required recordkeeping requirements associated with the startup, shutdown, and malfunction plan.

10.4.8.7 The schedule for review and update of the startup, shutdown, and malfunction plan.

10.5 Monitoring requirements.

The owner or operator of an affected source, who uses a control system to comply with 10.4.1.2, 10.4.5, 10.4.6.1, or 10.4.6.2 of this regulation, shall install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop across each control device during all times that the affected process tank or other operation is operating. The differential pressure drop shall be recorded at least once per day. If a differential pressure drop is observed outside of the operating range

specified by the control device manufacturer, the owner or operator shall take immediate corrective action. The owner or operator shall also record the incident and the corrective actions taken.

10.6 Initial compliance demonstration.

To demonstrate initial compliance, the owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall be in compliance with the applicable requirements in 10.6.1 through 10.6.12 of this regulation.

10.6.1 The owner or operator of an affected non-cyanide electrolytic process tank, who uses a wetting agent/fume suppressant to comply with 10.4.1.1 of this regulation, shall demonstrate initial compliance according to 10.6.1.1 through 10.6.1.4 of this regulation.

10.6.1.1 The owner or operator shall add the wetting agent/fume suppressant to the tank bath according to the manufacturer's specifications and instructions.

10.6.1.2 The owner or operator shall state in the notification of compliance status that the wetting agent/fume suppressant has been added to the tank bath according to the manufacturer's specifications and instructions.

10.6.1.3 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.1.4 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.2 The owner or operator of an affected non-cyanide electrolytic process tank, who uses a control system to comply with 10.4.1.2 of this regulation, shall demonstrate initial compliance according to 10.6.2.1 through 10.6.2.6 of this regulation.

10.6.2.1 The owner or operator shall install a control system designed to ~~collect~~ capture emissions from the affected process tank and transport the emissions to a composite mesh pad, packed-bed scrubber, or mesh pad mist eliminator.

10.6.2.2 The owner or operator shall, at all times, follow the manufacturer's specifications and operating instructions for the control system.

10.6.2.3 The owner or operator shall, at all times, keep the manufacturer's operating instructions in a location at the facility where they can be easily accessed by the operators.

10.6.2.4 The owner or operator shall state in the notification of compliance status that a control system has been installed and operated according to the manufacturer's specifications and operating instructions.

10.6.2.5 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.2.6 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.3 The owner or operator of an affected batch non-cyanide electrolytic process tank, who uses a tank cover to comply with 10.4.1.3.1 of this regulation, shall demonstrate initial compliance according to 10.6.3.1 through 10.6.3.4 of this regulation. ***No change warranted.***

10.6.3.1 The owner or operator shall install a tank cover on the process tank.

10.6.3.2 The owner or operator shall state in the notification of compliance status that the process tank is operated with the tank cover in place at least 95% of the electrolytic process operating time.

10.6.3.3 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.3.4 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.4 The owner or operator of an affected continuous non-cyanide electrolytic process tank, who uses a surface cover to comply with 10.4.1.3.2 of this regulation, shall demonstrate initial compliance according to 10.6.4.1 through 10.6.4.4 of this regulation. ***No change warranted.***

10.6.4.1 The owner or operator shall install a surface cover on the process tank.

10.6.4.2 The owner or operator shall state in the notification of compliance status that the process tank is operated with a surface cover that covers at least 75% of the surface area of the process tank, whenever the electrolytic process tank is in operation.

10.6.4.3 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.4.4 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.5 The owner or operator of an affected flash ~~or short-term~~ electrolytic process tank, who limits the electroplating time to comply with 10.4.2.1 of this regulation, shall demonstrate initial compliance according to 10.6.5.1 through 10.6.5.3 of this regulation. ***No change warranted.***

10.6.5.1 The owner or operator shall state in the notification of compliance status that the flash ~~or short-term~~ electroplating is limited to no more than one cumulative hour per day or three cumulative minutes per hour of electroplating time.

10.6.5.2 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.5.3 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.6 The owner or operator of an affected flash ~~or short-term~~ electrolytic process tank, who uses a tank cover to comply with 10.4.2.2 of this regulation, shall demonstrate initial compliance according to 10.6.6.1 through 10.6.6.4 of this regulation. ***No change warranted.***

10.6.6.1 The owner or operator shall install a tank cover on the process tank.

10.6.6.2 The owner or operator shall state in the notification of compliance status that the process tank is operated with the tank cover in place at least 95% of the electrolytic process operating time.

10.6.6.3 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.6.4 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.7 The owner or operator of an affected cyanide electrolytic process tank shall demonstrate initial compliance according to 10.6.7.1 through 10.6.7.3 of this regulation.

10.6.7.1 The owner or operator shall state in the notification of compliance status that the pH of the tank bath ~~is~~ was measured ~~upon~~ at startup of the tank bath according to the requirements of 10.4.4 of this regulation.

10.6.7.2 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.7.3 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.8 The owner or operator of an affected dry mechanical polishing operation shall demonstrate initial compliance according to 10.6.8.1 through 10.6.8.4 of this regulation.

10.6.8.1 The owner or operator shall install a control system that is designed to ~~collect~~ capture PM emissions from the dry mechanical polishing operation and transport the PM emissions to a cartridge, fabric, or HEPA filter.

10.6.8.2 The owner or operator, at all times, shall follow the manufacturer's specifications and operating instructions for the control system.

10.6.8.3 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.6.8.4 The owner or operator shall state in the notification of compliance status that a control system has been installed and operated according to the manufacturer's specifications and operating instructions.

10.6.8.5 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.8.6 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.9 The owner or operator of an existing affected permanent thermal spraying operation shall demonstrate initial compliance according to 10.6.9.1 through 10.6.9.6 of this regulation.

10.6.9.1 The owner or operator shall install a control system that is designed to ~~collect~~ capture PM emissions from the thermal spraying operation and transport the PM emissions to a water curtain, cartridge filter, fabric filter, or HEPA filter.

10.6.9.2 The owner or operator shall, at all times, follow the manufacturer's specifications and operating instructions for the control system.

10.6.9.3 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.6.9.4 The owner or operator shall state in the notification of compliance status that a control system has been installed and operated according to the manufacturer's specifications and operating instructions.

10.6.9.5 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.9.6 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.10 The owner or operator of a new or reconstructed affected permanent thermal spraying operation shall demonstrate initial compliance according to 10.6.10.1 through 10.6.10.6 of this regulation.

10.6.10.1 The owner or operator shall install a control system that is designed to ~~collect~~ capture PM emissions from the thermal spraying operation and transport the PM emissions to a cartridge, fabric, or HEPA filter.

10.6.10.2 The owner or operator shall, at all times, follow the manufacturer's specifications and operating instructions for the control system.

10.6.10.3 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.6.10.4 The owner or operator shall state in the notification of compliance status that a control system has been installed and operated according to the manufacturer's specifications and operating instructions.

10.6.10.5 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.10.6 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.11 The owner or operator of an affected temporary thermal spraying operation shall demonstrate initial compliance according to 10.6.11.1 through 10.6.11.3 of this regulation.

10.6.11.1 The owner or operator shall state in the notification of compliance status that the temporary thermal spraying operation is limited to no more than one hour during any one day.

10.6.11.2 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.11.3 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.6.12 Except as otherwise provided for in 10.6.1 through 10.6.11 of this regulation, the owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall demonstrate initial compliance according to 10.6.12.1 ~~through~~ and 10.6.12.2 of this regulation.

10.6.12.1 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation.

10.6.12.2 The owner or operator shall state in the notification of compliance status that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7 Ongoing compliance demonstration.

To demonstrate continuous compliance, the owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall be in compliance with the applicable requirements in 10.7.1 through 10.7.13 of this regulation.

10.7.1 The owner or operator shall always operate and maintain the affected source, including the control system, according to the manufacturer's specifications and operating instructions.

10.7.2 The owner or operator shall prepare an annual compliance certification report according to the requirements in 10.9 of this regulation and keep the annual compliance certification reports in a readily-accessible location for inspector review.

10.7.3 The owner or operator of an affected non-cyanide electrolytic process tank, who uses a wetting agent/fume suppressant to comply with 10.4.1.1 of this regulation, shall demonstrate continuous compliance according to 10.7.3.1 through 10.7.3.5 of this regulation.

10.7.3.1 The owner or operator shall record that the wetting agent/fume suppressant was added to the tank bath in the original make-up of the process tank.

10.7.3.2 For process tanks where the wetting agent/fume suppressant is a separate~~ly purchased~~ ingredient from the other tank bath chemistry ingredients, the owner or operator shall demonstrate continuous compliance according to 10.7.3.2.1 and 10.7.3.2.2 of this regulation.

10.7.3.2.1 When replenishing the tank bath, the owner or operator shall add the wetting agent/fume suppressant to the other bath chemistry ingredients in the same proportion as in the original make-up of the tank bath or in proportions such that the tank bath contents are returned to that of the original make-up of the tank bath.

10.7.3.2.2 The owner or operator shall record each addition of the wetting agent/fume suppressant to the tank bath.

10.7.3.3 The owner or operator shall state in the annual compliance certification report that the wetting agent/fume suppressant has been added to the tank bath according to the manufacturer's specifications and instructions.

10.7.3.4 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.3.5 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.4 The owner or operator of an affected non-cyanide electrolytic process tank, who uses a control system to comply with 10.4.1.2 of this regulation, shall demonstrate continuous compliance according to 10.7.4.1 through 10.7.4.7 of this regulation.

10.7.4.1 The owner or operator shall operate and maintain the control system according to the manufacturer's specifications and operating instructions.

10.7.4.2 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.7.4.3 Following any malfunction or failure of the capture system or control device to operate properly, the owner or operator shall take immediate corrective action to return the equipment to proper operation according to the manufacture's specifications and operating instructions.

10.7.4.4 The owner or operator shall record the results of all control system inspections, any deviations from proper operation, and any corrective action taken.

10.7.4.5 The owner or operator shall state in the annual compliance certification report that the control system has been operated and maintained according to the manufacturer's specifications and operating instructions.

10.7.4.6 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.4.7 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.5 The owner or operator of an affected batch non-cyanide electrolytic process tank, who uses a tank cover to comply with 10.4.1.3.1 of this regulation, shall demonstrate continuous compliance according to 10.7.5.1 through 10.7.5.5 of this regulation. ***No change warranted.***

10.7.5.1 The owner or operator shall operate the process tank with the tank cover in place at least 95% of the electrolytic process operating time.

10.7.5.2 The owner or operator shall record the times that the process tank is operated and the times that the tank cover is in place on a daily basis.

10.7.5.3 The owner or operator shall state in the annual compliance certification report that the process tank has been operated with the tank cover in place at least 95% of the electrolytic process operating time.

10.7.5.4 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.5.5 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.6 The owner or operator of an affected continuous non-cyanide electrolytic process tank, who uses a surface cover to comply with 10.4.1.3.2 of this regulation, shall demonstrate continuous compliance according to 10.7.6.1 ~~and~~ through 10.7.6.4 of this regulation. ***No change warranted.***

10.7.6.1 The owner or operator shall operate the process tank with a surface cover that covers at least 75% of the surface area of the process tank, whenever the electrolytic process tank is in operation.

10.7.6.2 The owner or operator shall state in the annual compliance certification report that the process tank has been operated with a surface cover that covers at least 75% of the surface area of the process tank, whenever the electrolytic process tank is in operation.

10.7.6.3 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.6.4 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.7 The owner or operator of an affected flash ~~or short-term~~ electrolytic process tank, who limits the electroplating time to comply with 10.4.2.1 of this regulation, shall demonstrate continuous compliance according to 10.7.7.1 through 10.7.7.5 of this regulation. ***No change warranted.***

10.7.7.1 The owner or operator shall limit flash ~~or short-term~~ electroplating to no more than one cumulative hour per day or three cumulative minutes per hour of electroplating time.

10.7.7.2 The owner or operator shall record the times that the process tank is operated each day.

10.7.7.3 The owner or operator shall state in the annual compliance certification report that flash ~~or short-term~~ electroplating has been limited to no more than one cumulative hour per day or three cumulative minutes per hour of electroplating time.

10.7.7.4 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.7.5 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.8 The owner or operator of an affected flash ~~or short-term~~ electrolytic process tank, who uses a tank cover to comply with 10.4.2.2 of this regulation, shall demonstrate continuous compliance according to 10.7.8.1 through 10.7.8.5 of this regulation. ***No change warranted.***

10.7.8.1 The owner or operator shall operate the process tank with the tank cover in place at least 95% of the electrolytic process operating time.

10.7.8.2 The owner or operator shall record the times that the process tank is operated and the times that the tank cover is in place on a daily basis.

10.7.8.3 The owner or operator shall state in the annual compliance certification report that the process tank has been operated with the tank cover in place at least 95% of the electrolytic process operating time.

10.7.8.4 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.8.5 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.9 The owner or operator of an affected cyanide electrolytic process tank shall demonstrate continuous compliance according to 10.7.9.1 and 10.7.9.4 of this regulation.

10.7.9.1 The owner or operator shall measure and record the pH of the tank bath upon startup of the tank bath.

10.7.9.2 The owner or operator shall state in the annual compliance certification report that the pH has been measured upon startup of the tank bath.

10.7.9.3 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.9.4 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.10 The owner or operator of an affected dry mechanical polishing operation shall demonstrate continuous compliance according to 10.7.10.1 through 10.7.10.~~5~~7 of this regulation.

10.7.10.1 The owner or operator shall operate and maintain the control system according to the manufacturer's specifications and operating instructions.

10.7.10.2 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.7.10.3 Following any malfunction or failure of the capture system or control device to operate properly, the owner or operator shall take immediate corrective action to return the equipment to proper operation according to the manufacturer's specifications and operating instructions.

10.7.10.4 The owner or operator shall record the results of all control system inspections, any deviations from proper operation, and any corrective action taken.

10.7.10.5 The owner or operator shall state in the compliance certification report that the control system has been operated and maintained according to the manufacturer's specifications and operating instructions.

10.7.10.6 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever the process tank is in operation.

10.7.10.7 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.11 The owner or operator of an affected permanent thermal spraying operation shall demonstrate continuous compliance according to 10.7.11.1 through 10.7.11.7 of this regulation.

10.7.11.1 The owner or operator shall operate and maintain the control system according to the manufacturer's specifications and operating instructions.

10.7.11.2 The owner or operator shall, at all times, keep the manufacturer's specifications and operating instructions in a location at the facility where they can be easily accessed by the operators.

10.7.11.3 Following any malfunction or failure of the capture system or control device to operate properly, the owner or operator shall take immediate corrective action to return the equipment to proper operation according to the manufacturer's specifications and operating instructions.

10.7.11.4 The owner or operator shall record the results of all control system inspections, any deviations from proper operation, and any corrective action taken.

10.7.11.5 The owner or operator shall state in the compliance certification report that the control system has been operated and maintained according to the manufacturer's specifications and operating instructions.

10.7.11.6 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever conducting thermal spraying operations.

10.7.11.7 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.12 The owner or operator of an affected temporary thermal spraying operation shall demonstrate continuous compliance according to 10.7.12.1 through 10.7.12.3 of this regulation.

10.7.12.1 The owner or operator shall state in the notification of compliance status that the temporary thermal spraying operation has been limited to no more than one hour during any one day.

10.7.12.2 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation, whenever conducting thermal spraying operations.

10.7.12.3 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.7.13 Except as otherwise provided for in 10.7.3 through 10.7.12 of this regulation, the owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall demonstrate continuous compliance according to 10.7.13.1 and 10.7.13.2 of this regulation.

10.7.13.1 The owner or operator shall implement the applicable management practices in 10.4.7 of this regulation during all times that the affected process tank or other operation is operating.

10.7.13.2 The owner or operator shall state in the annual compliance certification report that the applicable management practices in 10.4.7 of this regulation have been implemented.

10.8 Notification requirements.

10.8.1 The owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall submit an initial notification in accordance with 10.8.1.1 ~~through~~ and 10.8.1.2 of this regulation by the applicable date in 10.8.1.3 or 10.8.1.4 of this regulation.

10.8.1.1 The initial notification shall include the information specified in 10.8.1.1.1 through 10.8.1.1.4 of this regulation.

10.8.1.1.1 The name and address of the owner or operator;

10.8.1.1.2 The address (i.e., physical location) of the affected source;

10.8.1.1.3 An identification of the relevant standard (i.e., 10.0 of ~~7~~ 7 **DE Admin. Code ~~1138~~** 1138) that is the basis of the notification and the affected source's compliance date; and

10.8.1.1.4 A brief description of the nature, size, design, and method of operation of the affected source and an identification of the types of emission points within the affected source subject to the relevant standard and types of plating and polishing metal HAPs emitted.

10.8.1.2 The initial notification shall include a description of the compliance method (e.g., use of wetting agent/fume suppressant, tank cover, surface cover, control system, or timing) for each affected source.

10.8.1.3 The owner or operator of an affected source that started up on or before July 1, 2008 shall submit an initial notification not later November 11, 2009.

10.8.1.4 The owner or operator of a~~n~~ new or reconstructed affected source that started up after July 1, 2008 shall submit an initial notification ~~not later than 120 calendar days after~~ upon startup of the affected source or November 11, 2009, whichever is later.

10.8.2 The owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall submit a notification of compliance status in accordance with 10.8.2.1 ~~and~~ through ~~10.8.2.2~~ 10.8.2.3 of this regulation.

10.8.2.1 The notification of compliance status shall be submitted before the close of business on the compliance date specified in 10.3 of this regulation.

10.8.2.2 The notification of compliance status shall include the items in 10.8.2.2.1 through 10.8.2.2.4 of this regulation.

10.8.2.2.1 Listing of affected sources and the plating and polishing metal HAPs used in, or emitted by, those sources.

10.8.2.2.2 Methods used to comply with the applicable standards and management practices in 10.4 of this regulation.

10.8.2.2.3 Description of the capture system and control device, if used to be in compliance with the applicable standards in 10.4 of this regulation.

10.8.2.2.4 Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards, management practices, or other requirements in 10.0 of this regulation.

10.8.2.3 If ~~a facility~~ the owner or operator makes a change to any items in ~~(b)(2)(i)~~ 10.8.2.2.1, ~~iii~~ 10.8.2.2.3, ~~and (iv)~~ or 10.8.2.2.4 of this ~~section~~ regulation that does not result in a deviation, an amended ~~N~~notification of ~~C~~compliance ~~S~~status ~~should~~ shall be submitted within 30 days of the change.

10.9 Reporting requirements.

10.9.1 The owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall prepare an annual compliance certification report according to 10.9.1.1 through 10.9.1.12 of this regulation. These reports do not need to be submitted unless a deviation from the requirements of 10.0 has occurred during the reporting year, in which case, the annual compliance certification report shall be submitted along with the deviation report.

10.9.1.1 The owner or operator of an affected non-cyanide electrolytic process tank that is subject to the requirements in 10.4.1.1 of this regulation shall state in the annual compliance certification report that the wetting agent/fume suppressant has been added to the tank bath according to the manufacturer's specifications and instructions.

10.9.1.2 The owner or operator of an affected non-cyanide electrolytic process tank that is subject to the requirements in 10.4.1.2 of this regulation shall state in the annual compliance certification report that the control system has been operated and maintained according to the manufacturer's specifications and operating instructions.

10.9.1.3 The owner or operator of an affected batch non-cyanide electrolytic process tank that is subject to the requirements in 10.4.1.3.1 of this regulation shall state in the annual compliance certification report that process tank has been operated with the tank cover in place at least 95% of the electrolytic process operating time. ***No change is warranted.***

10.9.1.4 The owner or operator of an affected continuous non-cyanide electrolytic process tank that is subject to the requirements in 10.4.1.3.2 of this regulation shall state in the annual compliance certification report that the process tank has been operated with a surface cover that covers at least 75% of the surface area of the process tank, whenever the electrolytic process tank is in operation. ***No change is warranted.***

10.9.1.5 The owner or operator of an affected flash ~~or short-term~~ electrolytic process tank that is subject to the requirements in 10.4.2.1 of this regulation shall state in the annual compliance certification report that flash ~~or short-term~~ electroplating has been limited to no more than one cumulative hour per day or three cumulative minutes per hour of electroplating time. ***No change is warranted.***

10.9.1.6 The owner or operator of an affected flash ~~or short-term~~ electrolytic process tank that is subject to the requirements in 10.4.2.2 of this regulation shall state in the annual compliance certification report that the process tank has been operated with the tank cover in place at least 95% of the electrolytic process operating time. ***No change is warranted.***

10.9.1.7 The owner or operator of an affected cyanide electrolytic process tank that is subject to the requirements in 10.4.4 of this regulation shall state in the annual compliance certification report that the pH of the tank bath has been measured upon startup of the tank bath.

10.9.1.8 The owner or operator of an affected dry mechanical polishing operation that is subject to the requirements in 10.4.5 of this regulation shall state in the annual compliance certification report that the control system has been operated and maintained according to the manufacturer's specifications and operating instructions.

10.9.1.9 The owner or operator of an affected permanent thermal spraying operation that is subject to the requirements in 10.4.6.1 or 10.4.6.2 of this regulation shall state in the annual compliance certification report that the control system has been operated and maintained according to the manufacturer's specifications and operating instructions.

10.9.1.10 The owner or operator of an affected temporary thermal spraying operation that is subject to the requirements in 10.4.6.3 of this regulation shall state in the annual compliance certification report that the temporary thermal spraying operation has been limited to no more than one hour during any one day.

10.9.1.11 The owner or operator of an affected process tank or other affected plating and polishing operation that is subject to the management practices in 10.4.7 of this regulation shall state in the annual compliance certification report that the applicable management practices have been implemented.

10.9.1.12 Each annual compliance certification report shall be prepared no later than January 31 of the year immediately following the reporting period and shall be kept in a readily-accessible location for inspector review. If a deviation has occurred during the reporting period, the annual compliance certification report shall be submitted along with the deviation report.

10.9.2 If any deviations from the applicable compliance requirements in 10.0 of this regulation occurred during the reporting period, the owner or operator of an affected source shall report the deviations and the corrective actions taken. The owner or operator shall submit the deviation and the annual compliance certification reports to the Department. The reports shall be postmarked or delivered to the Department no later than January 31 of the year immediately following the reporting period.

10.10 Recordkeeping requirements.

10.10.1 The owner or operator of an affected source subject to the provisions of 10.0 of this regulation shall keep the records specified in 10.10.1.1 through 10.10.1.10 of this regulation.

10.10.1.1 A copy of any initial notification, notification of compliance status, and deviation report that the owner or operator submitted and all documentation supporting those notifications and reports.

10.10.1.2 A copy of the annual compliance certification report and all documentation supporting those reports.

10.10.1.3 Records of the daily differential pressure drop observations required in 10.5 of this regulation.

10.10.1.4 The inspection records for the control devices and monitoring equipment, to document that the inspection and maintenance required by the startup, shutdown, and malfunction plan in 10.4.8 of this regulation have taken place. The record can take the form of a checklist and should identify the control device and associated monitoring equipment inspected, the date of inspection, a brief description of the working condition of the control device during the inspection, and any actions taken to correct deficiencies found during the inspection.

10.10.1.5 The records of the occurrence, duration and cause (if known) of each startup, shutdown, or malfunction of an affected process tank or other operation.

10.10.1.6 The records of the occurrence, duration, and cause (if known) of each malfunction of a required control system and associated monitoring equipment.

10.10.1.7 The records of actions taken during periods of malfunction when such actions are inconsistent with the provisions of the startup, shutdown, and malfunction plan in 10.4.8 of this regulation.

10.10.1.8 Records of all required maintenance performed on the control system and associated monitoring equipment.

10.10.1.9 Other records, which may take the form of checklists, necessary to demonstrate conformance with the provisions of the startup, shutdown, and malfunction plan in 10.4.8 of this regulation.

10.10.1.10 The records required to demonstrate continuous compliance with each applicable standard and management practice that applies to the owner or operator in accordance with 10.7 of this regulation.

10.10.2 The owner or operator shall keep each record for a minimum of ~~5~~ five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The owner or operator shall keep each record onsite for at least ~~2~~ two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The owner or operator may keep the records offsite for the remaining ~~3~~ three years.

10.10.3 The owner or operator shall maintain files of all information (including all reports and notifications) required by 10.0 of this regulation recorded in a form suitable and readily available for expeditious inspection and review. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

10.11 Applicability of general provisions.

The owner or operator of an affected sources subject to the provisions of 10.0 of this regulation shall also be in compliance with the provisions in 3.0 of this regulation that are applicable to 10.0, as specified in Table 10-1 of this regulation.

10.12 [Reserved]

Table 10-1 - Applicability of 3.0 to 10.0 of this Regulation

General Provision Reference	Applies to 10.0	Comment
3.1.1.1	Yes	Additional terms defined in 10.2 of this regulation; when overlap between ~~3.0~~ 3.2 and ~~10.0~~ 10.2 of this regulation occurs, ~~10.0~~ 10.2 takes precedence.
3.1.1.2 - 3.1.1.3	Yes	
3.1.1.4	Yes	10.0 of this regulation clarifies the applicability of each provision in 3.0 of this regulation to sources subject to 10.0.
3.1.1.5	No	Reserved.
3.1.1.6	Yes	
3.1.1.7 - 3.1.1.9	No	Reserved.
3.1.1.10 - 3.1.1.12	Yes	
3.1.1.13 - 3.1.1.14	No	Reserved.
3.1.2.1 - 3.1.2.3	Yes	
3.1.3.1	Yes	10.0 of this regulation clarifies the applicability of each paragraph in 3.0 of this regulation to sources subject to 10.0.
3.1.3.2	Yes	10.1.7 of this regulation exempts area sources from the obligation to obtain Title V operating permits.
3.1.3.3 - 3.1.3.4	No	Reserved.
3.1.3.5	Yes	
3.1.4	No	Reserved.
3.1.5	Yes	10.1.7 of this regulation exempts affected sources from the obligation to obtain Title V operation permits.
3.2	Yes	Additional terms defined in 10.2 of this regulation; when overlap between ~~3.0~~ 3.2 and ~~10.0~~ 10.2 of this regulation occurs, ~~10.0~~ 10.2 takes precedence.
3.3	Yes	
3.4.1.1 - 3.4.1.2	Yes	
3.4.1.3 - 3.4.1.5	No	Reserved.
3.4.2 - 3.4.2.2	Yes	
3.4.2.3	No	Reserved.
3.4.3	Yes	
3.5.1 - 3.5.2.1	Yes	
3.5.2.2	No	Reserved.
3.5.2.3 - 3.5.2.4	Yes	
3.5.2.5	No	Reserved.
3.5.2.6	Yes	
3.5.3	No	Reserved.
3.5.4.1.1 - 3.5.4.1.2.8	Yes	
3.5.4.1.2.9	No	Reserved.
3.5.4.1.2.10 - 3.5.4.4	Yes	
3.5.5	Yes	
3.5.6 - 3.5.6.1.1	Yes	
3.5.6.1.2 - 3.5.6.1.4	No	Reserved.
3.5.6.2	Yes	
3.6.1	Yes	

3.6.2 - 3.6.2.5	Yes	
3.6.2.6	No	Reserved.
3.6.2.7	Yes	
3.6.3.1 - 3.6.3.2	Yes	
3.6.3.3 - 3.6.3.4	No	Reserved.
3.6.3.5	Yes	
3.6.4	No	Reserved.
3.6.5 - 3.6.5.1	~~Yes~~ No	
3.6.5.2	No	Reserved.
3.6.5.3	~~Yes~~ No	However, 10.4.8 of this regulation specifies the minimum contents of the startup, shutdown, and malfunction plan for sources using a capture system and control device to comply with the 10.4 of this regulation.
3.6.6 ~~- 3.6.6.2.2~~	Yes	
3.6.6.1	No	Standards apply at all times, including during startup, shutdown, and malfunction events.
3.6.6.2 - 3.6.6.2.2	Yes	
3.6.6.2.3	No	10.0 of this regulation does not require performance testing.
3.6.6.2.4 - 3.6.6.3	Yes	
3.6.7	Yes	
3.6.8	No	10.0 of this regulation does not contain any opacity or visible emission standards.
3.6.9 - 3.6.9.6.1.2.1	Yes	
3.6.9.6.1.2.2	No	Reserved.
3.6.9.6.1.2.3 - 3.6.9.6.1.2.4	Yes	
3.6.9.6.1.3 - 3.6.9.6.1.4	No	Reserved.
3.6.9.6.2 - 3.6.9.14	Yes	
3.6.9.15	No	Reserved.
3.6.9.16	Yes	
3.6.10	Yes	
3.7	No	10.0 of this regulation does not require performance testing.
3.8 - 3.8.5	No	10.5 of this regulation specifies the monitoring requirements.
3.8.6	Yes	
3.8.7	No	10.5 of this regulation specifies the monitoring requirements.
3.9.1 - 3.9.1.4	Yes	
3.9.1.4.1	No	Reserved.
3.9.1.4.2 - 3.9.2.2.5	Yes	Except that 10.8.1 of this regulation specifies the initial notification requirements.
3.9.2.3	No	Reserved.
3.9.2.4 - 3.9.2.4.1	Yes	
3.9.2.4.2 - 3.9.2.4.4	No	Reserved.
3.9.2.4.5 - 3.9.4	Yes	
3.9.5 - 3.9.7	No	
3.9.8 - 3.9.8.3	Yes	Except that 10.8.2 of this regulation specifies the notification of compliance status requirements.
3.9.8.4	No	Reserved.
3.9.8.5 - 3.9.10	Yes	
3.10.1 - 3.10.1.4	Yes	
3.10.1.4.1	No	Reserved.
3.10.1.4.2 - 3.10.1.7	Yes	
3.10.2.1 - 3.10.2.2.5	Yes	
3.10.2.2.6 - 3.10.2.2.13	No	

3.10.2.2.14	Yes	
3.10.2.3	Yes	
3.10.3	No	
3.10.4.1	Yes	
3.10.4.2 - 3.10.4.4	No	
3.10.4.5	Yes	Except that 10.9 of this regulation specifies reporting requirements under the requirements for the annual compliance certification report and the deviation report.
3.10.5	No	
3.10.6	Yes	
3.11	No	10.0 of this regulation does not require flares.
3.12	Yes	
3.13	Yes	
3.14	Yes	
3.15	Yes	

13 DE Reg. 668 (11/01/09)